

01-23-06

RCE
JFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Douglas R. Coffland, et al.

Serial No.: 09/405,031

Filed: 09/24/1999

For: SYSTEM AND METHOD FOR MULTIMEDIA ENCRYPTION



Attorney Docket No.: IL-10360

Group Art Unit: 2164

Examiner: Jacob F. Betit

**Commissioner for Patents
Alexandria, VA 22313-1450**

EXPRESS MAIL CERTIFICATE

Express Mail No.: EV769097192US

Date of Deposit: January 20, 2006

I hereby certify that the following attached:

1. Transmittal of Appellant's Brief w/ Express Mail Certificate (2 pages)(in duplicate)
2. Appellant's Brief w/Express Mail Certificate (29 pages)
3. Return Postcard

Fee \$250.00

is being deposited with the United States Postal Service "Express Mail Post Office to Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Kathy Raymond

(Type or print name of person mailing paper)

A handwritten signature of Kathy Raymond in black ink, written over a horizontal line.

Signature of person mailing paper or fee



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :	Douglas R. Coffland, et al.	Docket No. :	IL-10360
Serial No. :	09/405,031	Art Unit :	2164
Filed :	09/24/1999	Examiner :	Jacob F. Betit
For :	SYSTEM AND METHOD FOR MULTIMEDIA ENCRYPTION		

TRANSMITTAL OF APPELLANTS' BRIEF
(PATENT APPLICATION - 37 CFR 192)

Transmitted herewith is Appellants' Brief in this application with respect to the Notice of Appeal filed on December 21, 2005.

The item(s) checked below are appropriate:

1. STATUS OF APPLICANT

This application is on behalf of

☐ other than a small entity.

☒ a small entity.

A verified statement

☐ is attached

☒ already filed.

2. FEE FOR FILING APPEAL BRIEF

Pursuant to 37 CFR 1.17(e) the fee for filing the Appeal Brief is:

☒ small entity \$250.00

☐ other than a small entity \$500.00

Appeal Brief fee due **\$250.00**

EXPRESS MAIL CERTIFICATE OF MAILING

Express Mail Certificate No. EV769097192US

I hereby certify that the *attached* correspondence comprising:

1. TRANSMITTAL OF APPELLANTS' BRIEF (37 C.F.R. § 1.192) (2 pages)

2. Return Postcard

is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" addressed to:

Mail Stop Appeal Brief-Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

on January 20, 2006

Kathy Raymond
Kathy Raymond

3. EXTENSION OF TIME

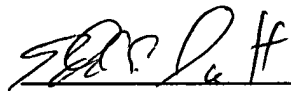
- ☐ Applicant petitions for an extension of time under 37 CFR 1.136

Calculation of extension fee (37 CFR 1.17(a)-(d)):

	Total months <u>requested</u>	Fee for other than <u>small entity</u>	Fee for <u>small entity</u>
<input type="checkbox"/>	one month	\$120.00	\$60.00
<input type="checkbox"/>	two month	\$450.00	\$225.00
<input type="checkbox"/>	three month	\$1,020.00	\$510.00
<input type="checkbox"/>	four month	\$1,590.00	\$795.00
<input type="checkbox"/>	five month	\$2,160.00	\$1,080.00
		Fee	<u>\$000.00</u>

4. FEE PAYMENT

- Charge Account No. 12-0695 in the amount of \$250.00.
- Charge Account No. 12-0695 for any additional extension and/or fee required or credit for any excess fee paid.



Eddie E. Scott
Agent for Applicant(s)
Reg. No. 25,220
Tel. No. (925) 424-6897

Date: January 19, 2006

**EXPRESS MAIL CERTIFICATE OF MAILING**Express Mail Certificate No. EV769097192USI hereby certify that the *attached* correspondence comprising:

1. APPELLANTS' BRIEF (37 C.F.R. § 1.192) (29 pages), 2. Return Postcard

is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" addressed to:

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on January 20, 2006

Kathy Raymond
Kathy Raymond

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant :	Douglas R. Coffland, et al.	Docket No. :	IL-10360
Serial No. :	09/405,031	Art Unit :	2164
Filed :	09/24/1999	Examiner :	Jacob F. Betit
For :	SYSTEM AND METHOD FOR MULTIMEDIA ENCRYPTION		

Honorable Commissioner for Patents
Alexandria, VA 22313-1450

Attention: Board of Patent Appeals and Interferences

Dear Sir:

APPELLANTS' BRIEF (37 C.F.R. § 1.192)

This brief is submitted in support of Appellants' notice of appeal from the decision of the Examiner, mailed October 21, 2005 finally rejecting claims 1-30 of the subject application. Appellants' notice of appeal was mailed December 21, 2005.

One copy of the brief is being transmitted per 37 C.F.R. § 41.37.

TABLE OF CONTENTS

	<u>PAGE</u>
I. REAL PARTY IN INTEREST	3
II. RELATED APPEALS AND INTERFERENCES	3
III. STATUS OF CLAIMS	3
IV. STATUS AMENDMENTS	3
V. SUMMARY OF CLAIMED SUBJECT MATTER	3
VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL	18
VII. ARGUMENT	19
VIII. CLAIMS APPENDIX	23
IX. EVIDENCE APPENDIX	28
X. RELATED PROCEEDING APPENDIX	29

I. REAL PARTY IN INTEREST

The real party in interest is:

The Regents of the University of California and the United States of America as represented by the United States Department of Energy (DOE) by virtue of an assignment by the inventor as duly recorded in the Assignment Branch of the U.S. Patent and Trademark Office.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF CLAIMS

The application as originally filed contained claims 1-30.

The claims on appeal are claims 1-30.

Claims 1-30 on appeal are reproduced in the Appendix.

IV. STATUS OF AMENDMENTS

There have been no amendments filed subsequent to the Final Rejection mailed October 21, 2005.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The elements of Appellants' claims on appeal will be "read on" Appellants' original specification. Portions of Appellants' specification will be quoted in this brief and the specific paragraph containing the quote is identified by the page and line numbers being enclosed in parentheses (...).

The invention defined by Appellants' claims 1-30 on appeal is "a system and method for multimedia encryption." Within the system of the present invention, a data compression module receives and compresses a media signal into a compressed data stream. A data acquisition module receives and selects a set of data from the compressed data stream. And, a hashing module receives and hashes the set of data into a keyword. (Page 4, lines 2-7)

Figure 1 (Illustrated Below) is a block diagram of a system 100 for multimedia encryption according to the present invention. Within the system 100, a transducer 102, such as a video camera, a radio, a microphone, a Geiger counter, or an electrical component, outputs a media signal 104. (Page 7, lines 2-5)

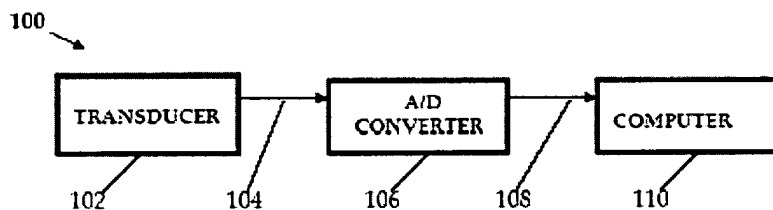


FIG. 1

Claim 1

1. A system for multimedia encryption comprising:

Specification & Drawings

Figure 1 is a block diagram of a system 100 for multimedia encryption according to the present invention. (Page 7, lines 2-3)

Claim 1 (Continued)

acquisition means for acquiring a media signal, said acquisition means including a random noise transducer for acquiring random noise only, said random noise being completely unpredictable from one moment to the next and not being chaotic noise;

data compression means coupled to said acquisition means to receive and compress said media signal containing random noise that is completely unpredictable from one moment to the next and not being chaotic noise into a compressed data stream;

data acquisition means coupled to said data compression means to receive and select a set of data from the compressed data stream; and

hashing means coupled to said data acquisition means to receive and hash the set of data into a keyword.

Specification & Drawings

In one embodiment of the present invention, the media signal need only include random transducer noise having a noise signal amplitude. Random noise is not the same a chaotic noise. Random noise, such as white Gaussian noise, is completely unpredictable from one moment to a next, while chaotic noise is highly predictable over short time periods. (Page 7, lines 10-15)

The media signal 104 from the transducer 102 is fed into an analog-to-digital (A/D) converter 106. The converter 106 quantizes the media signal with a quantization step size smaller than the noise signal amplitude within the media signal 104, creating a quantized media signal 108. (Page 7, lines 19-22)

Figure 2 is a graphical depiction of quantization processes within the analog-to-digital converter 106 within the system 100. The media signal 104 is periodically sampled 202. (Page 8, lines 2-4)

And, a hashing module receives and hashes the set of data into a keyword. (Page 4, lines 6-7)
a hashing module coupled to receive and hash the set of data into a keyword. (Original Claim 1 lines 7-8, Page 14)

Claim 2

2. The system of claim 1 wherein the set of data is one frame of data within the compressed data stream.

Specification & Drawings

The system of claim 1 wherein the set of data is one frame of data within the compressed data stream. (Original Claim 2 lines 1-2, Page 14)

Claim 3

3. The system of claim 1 wherein the set of data crosses over several frame boundaries within the compressed data stream.

Specification & Drawings

The system of claim 1 wherein the set of data crosses over several frame boundaries within the compressed data stream. (Original Claim 3 lines 1-2, Page 14)

Claim 4

4. The system of claim 1 wherein: the compressed data stream includes compression transform coefficients; and the set of data includes a set of compression transform coefficients.

Specification & Drawings

The system of claim 1 wherein: the compressed data stream includes compression transform coefficients; and the set of data includes a set of compression transform coefficients. (Original Claim 4 lines 1-4, Page 14)

Claim 5

5. The system of claim 1 wherein: the compressed data stream includes data frames of varying length; and the set of data includes a set of data frames.

Specification & Drawings

The system of claim 1 wherein: the compressed data stream includes data frames of varying length; and the set of data includes a set of data frames. (Original Claim 5 lines 1-2, Page 14 & line 3, Page 15)

Claim 6

6. The system of claim 1 wherein: the compressed data stream includes predictive data frames; and the set of data includes a predictive data frame.

Specification & Drawings

The system of claim 1 wherein: the compressed data stream includes predictive data frames; and the set of data includes a predictive data frame. (Original Claim 6 lines 1-3, Page 15)

Claim 7

7. The system of claim 1: wherein the media signal includes a noise signal amplitude; further comprising, an analog to digital converter, having a quantization step size smaller than the noise signal amplitude, coupled to receive and quantize the media signal; and wherein the data compression module compresses the quantized media signal into a compressed data stream.

Specification & Drawings

The system of claim 1: wherein the media signal includes a noise signal amplitude; further comprising, an analog to digital converter, having a quantization step size smaller than the noise signal amplitude, coupled to receive and quantize the media signal; and wherein the data compression module compresses the quantized media signal into a compressed data stream. (Original Claim 7 lines 1-8, Page 15)

Claim 8

8. The system of claim 1 wherein the data compression module compresses the media signal into one from a group consisting of: MJPEG, MPEG1, MPEG2, or MPEG4, H.261, H.320, and H.323 formats.

Claim 9

9. The system of claim 1 further comprising: a pseudo-random number generator coupled to receive and process the keyword in to a set of keywords.

Claim 10

10. A method for multimedia encryption, comprising the steps of:

acquiring a random noise only media signal containing random noise that is completely unpredictable from one moment to the next and not being chaotic noise;

Specification & Drawings

The system of claim 1 wherein the data compression module compresses the media signal into one from a group consisting of: MJPEG, MPEG1, MPEG2, or MPEG4, H.261, H.320, and H.323 formats. (Original Claim 8 lines 1-3. Page 15)

Specification & Drawings

The system of claim 1 further comprising: a pseudo-random number generator coupled to receive and process the keyword in to a set of keywords. (Original Claim 9 lines 1-3, Page 15)

Specification & Drawings

Figure 1 is a block diagram of a system 100 for multimedia encryption according to the present invention. (Page 7, lines 2-3)

In one embodiment of the present invention, the media signal need only include random transducer noise having a noise signal amplitude. Random noise is not the same a chaotic noise. Random noise, such as white Gaussian noise, is completely unpredictable from one moment to a next, while chaotic noise is highly predictable over short time periods. (Page 7, lines 10-15)

Claim 10 (Continued)

compressing said random noise only media signal containing random noise that is completely unpredictable from one moment to the next and not being chaotic noise;

selecting a set of data from the compressed media signal; and

hashing the set of data into a keyword.

Claim 11

11. The method of claim 10 wherein: the compressed media signal includes data frames; and the selecting step includes the step of selecting one frame of data.

Specification & Drawings

The media signal 104 from the transducer 102 is fed into an analog-to-digital (A/D) converter 106. The converter 106 quantizes the media signal with a quantization step size smaller than the noise signal amplitude within the media signal 104, creating a quantized media signal 108. (Page 7, lines 19-22)

Figure 2 is a graphical depiction of quantization processes within the analog-to-digital converter 106 within the system 100. The media signal 104 is periodically sampled 202. (Page 8, lines 2-4)

And, a hashing module receives and hashes the set of data into a keyword. (Page 4, lines 6-7)
a hashing module coupled to receive and hash the set of data into a keyword. (Original Claim 1 lines 7-8, Page 14)

Specification & Drawings

The method of claim 10 wherein: the compressed media signal includes data frames; and the selecting step includes the step of selecting one frame of data. (Original Claim 11 lines 1-3, Page 16)

Claim 12

12. The method of claim 10 wherein: the compressed media signal includes data frames and data frame boundaries; and the selecting step includes the step of selecting a set of data which crosses over several data frame boundaries.

Specification & Drawings

The method of claim 10 wherein: the compressed media signal includes data frames and data frame boundaries; and the selecting step includes the step of selecting a set of data which crosses over several data frame boundaries. (Original Claim 12 lines 1-5, Page 16)

Claim 13

13. The method of claim 10 wherein: the compressed media signal includes compression transform coefficients; and the selecting step includes the step of selecting a set of compression transform coefficients.

Specification & Drawings

The method of claim 10 wherein: the compressed media signal includes compression transform coefficients; and the selecting step includes the step of selecting a set of compression transform coefficients. (Original Claim 13 lines 1-5, Page 16)

Claim 14

14. The method of claim 10 wherein: the compressed media signal includes data frames of varying length; and the selecting step includes the step of selecting a set of data frames.

Specification & Drawings

The method of claim 10 wherein: the compressed media signal includes data frames of varying length; and the selecting step includes the step of selecting a set of data frames. (Original Claim 14 line 1 Page 16 & lines 2-4, Page 17)

Claim 15

15. The method of claim 10 wherein: the compressed media signal includes predictive data frames; and the selecting step includes the step of selecting a predictive data frame.

Specification & Drawings

The method of claim 10 wherein: the compressed media signal includes predictive data frames; and the selecting step includes the step of selecting a predictive data frame. (Original Claim 15 lines 1-3, Page 17)

Claim 16

16. The method of claim 10: wherein the media signal includes a noise signal amplitude; further comprising the step of quantizing the media signal with a quantization step size smaller than the noise signal amplitude; and wherein the compressing step includes the step of compressing the quantized media signal.

Specification & Drawings

The method of claim 10: wherein the media signal includes a noise signal amplitude; further comprising the step of quantizing the media signal with a quantization step size smaller than the noise signal amplitude; and wherein the compressing step includes the step of compressing the quantized media signal. (Original Claim 16 lines 1-6, Page 17)

Claim 17

17. A system for multimedia encryption, comprising:

Specification & Drawings

Figure 1 is a block diagram of a system 100 for multimedia encryption according to the present invention. (Page 7, lines 2-3)

Claim 17 (Continued)

acquisition means for acquiring a media signal, said acquisition means including a random noise transducer for acquiring said media signal, said random noise transducer acquiring said media signal containing only random noise that is completely unpredictable from one moment to the next and not being chaotic noise;

data compression means coupled to said acquisition means to receive and compress said media signal containing random noise that is completely unpredictable from one moment to the next into a compressed data stream;

selection means coupled to said data compression means for selecting a set of data from the compressed data stream; and

hashing means coupled to said selection means for hashing the set of data into a keyword.

Specification & Drawings

In one embodiment of the present invention, the media signal need only include random transducer noise having a noise signal amplitude. Random noise is not the same as chaotic noise. Random noise, such as white Gaussian noise, is completely unpredictable from one moment to the next, while chaotic noise is highly predictable over short time periods. (Page 7, lines 10-15)

The media signal 104 from the transducer 102 is fed into an analog-to-digital (A/D) converter 106. The converter 106 quantizes the media signal with a quantization step size smaller than the noise signal amplitude within the media signal 104, creating a quantized media signal 108. (Page 7, lines 19-22)

Figure 2 is a graphical depiction of quantization processes within the analog-to-digital converter 106 within the system 100. The media signal 104 is periodically sampled 202. (Page 8, lines 2-4)

And, a hashing module receives and hashes the set of data into a keyword. (Page 4, lines 6-7)
a hashing module coupled to receive and hash the set of data into a keyword. (Original Claim 1 lines 7-8. Page 14)

Claim 18

18. The system of claim 17 wherein: the compressed media signal includes data frames; and the means for selecting includes means for selecting one frame of data.

Specification & Drawings

The system of claim 17 wherein: the compressed media signal includes data frames; and the means for selecting includes means for selecting one frame of data. (Original Claim 18 lines 1-3, Page 17)

Claim 19

19. The system of claim 17 wherein: the compressed media signal includes data frames and data frame boundaries; and the means for selecting includes means for selecting a set of data which crosses over several data frame boundaries.

Specification & Drawings

The system of claim 17 wherein: the compressed media signal includes data frames and data frame boundaries; and the means for selecting includes means for selecting a set of data which crosses over several data frame boundaries. (Original Claim 19 lines 1-5, Page 18)

Claim 20

20. The system of claim 17 wherein: the compressed media signal includes compression transform coefficients; and the means for selecting includes means for selecting a set of compression transform coefficients.

Specification & Drawings

The system of claim 17 wherein: the compressed media signal includes compression transform coefficients; and the means for selecting includes means for selecting a set of compression transform coefficients. (Original Claim 20 lines 1-5, Page 18)

Claim 21

21. The system of claim 17 wherein: the compressed media signal includes data frames of varying length; and the means for selecting includes means for selecting a set of data frames.

Specification & Drawings

The system of claim 17 wherein: the compressed media signal includes data frames of varying length; and the means for selecting includes means for selecting a set of data frames. (Original Claim 21 lines 1-5 Page 18)

Claim 22

22. The system of claim 17 wherein: the compressed media signal includes predictive data frames; and the means for selecting includes means for selecting a predictive data frame.

Specification & Drawings

The system of claim 17 wherein: the compressed media signal includes predictive data frames; and the means for selecting includes means for selecting a predictive data frame. (Original Claim 22 lines 1-4, Page 18)

Claim 23

23. The system of claim 17: wherein the media signal includes a noise signal amplitude; further comprising means for quantizing the media signal with a quantization step size smaller than the noise signal amplitude; and wherein the means for compressing includes means for compressing the quantized media signal.

Specification & Drawings

The system of claim 17: wherein the media signal includes a noise signal amplitude; further comprising means for quantizing the media signal with a quantization step size smaller than the noise signal amplitude; and wherein the means for compressing includes means for compressing the quantized media signal. (Original Claim 23 lines 1-6, Page 19)

Claim 24

24. A computer-useable medium embodying computer program code for multimedia encryption by executing the steps of:

acquiring a random noise only media signal, said random noise only media signal containing random noise that is completely unpredictable from one moment to the next and not being chaotic noise;

compressing said random noise only media signal, said random noise only media signal containing random noise that is completely unpredictable from one moment to the next and not being chaotic noise;

selecting a set of data from the compressed media signal; and

Specification & Drawings

Figure 1 is a block diagram of a system 100 for multimedia encryption according to the present invention. (Page 7, lines 2-3)

In one embodiment of the present invention, the media signal need only include random transducer noise having a noise signal amplitude. Random noise is not the same a chaotic noise. Random noise, such as white Gaussian noise, is completely unpredictable from one moment to a next, while chaotic noise is highly predictable over short time periods. (Page 7, lines 10-15)

The media signal 104 from the transducer 102 is fed into an analog-to-digital (A/D) converter 106. The converter 106 quantizes the media signal with a quantization step size smaller than the noise signal amplitude within the media signal 104, creating a quantized media signal 108. (Page 7, lines 19-22)

Figure 2 is a graphical depiction of quantization processes within the analog-to-digital converter 106 within the system 100. The media signal 104 is periodically sampled 202. (Page 8, lines 2-4)

hashing the set of data into a keyword.

And, a hashing module receives and hashes the set of data into a keyword. (Page 4, lines 6-7)
a hashing module coupled to receive and hash the set of data into a keyword. (Original Claim 1 lines 7-8, Page 14)

Claim 25

25. The computer-useable medium of claim 24 wherein: the compressed media signal includes data frames; and the selecting step includes the step of selecting one frame of data.

Specification & Drawings

The computer-useable medium of claim 24 wherein: the compressed media signal includes data frames; and the selecting step includes the step of selecting one frame of data. (Original Claim 25 lines 1-3, Page 19)

Claim 26

26. The computer-useable medium of claim 24 wherein: the compressed media signal includes data frames and data frame boundaries; and the selecting step includes the step of selecting a set of data which crosses over several data frame boundaries.

Specification & Drawings

The computer-useable medium of claim 24 wherein: the compressed media signal includes data frames and data frame boundaries; and the selecting step includes the step of selecting a set of data which crosses over several data frame boundaries. (Original Claim 26 lines 1-5, Page 19)

Claim 27

27. The computer-useable medium of claim 24 wherein: the compressed media signal includes compression transform coefficients; and the selecting step includes the step of selecting a set of compression transform coefficients.

Specification & Drawings

The computer-useable medium of claim 24 wherein: the compressed media signal includes compression transform coefficients; and the selecting step includes the step of selecting a set of compression transform coefficients. (Original Claim 27 lines 1-5, Page 20)

Claim 28

28. The computer-useable medium of claim 24 wherein: the compressed media signal includes data frames of varying length; and the selecting step includes the step of selecting a set of data frames.

Specification & Drawings

The computer-useable medium of claim 24 wherein: the compressed media signal includes data frames of varying length; and the selecting step includes the step of selecting a set of data frames. (Original Claim 28 lines 1-4, Page 20)

Claim 29

29. The computer-useable medium of claim 24 wherein: the compressed media signal includes predictive data frames; and the selecting step includes the step of selecting a predictive data frame.

Specification & Drawings

The computer-useable medium of claim 24 wherein: the compressed media signal includes predictive data frames; and the selecting step includes the step of selecting a predictive data frame. (Original Claim 29 lines 1-3, Page 20)

Claim 30

30. The computer-useable medium of claim 24: wherein the media signal includes a noise signal amplitude; further comprising the step of quantizing the media signal with a quantization step size smaller than the noise signal amplitude; and wherein the compressing step includes the step of compressing the quantized media signal.

Specification & Drawings

The computer-useable medium of claim 24: wherein the media signal includes a noise signal amplitude; further comprising the step of quantizing the media signal with a quantization step size smaller than the noise signal amplitude; and wherein the compressing step includes the step of compressing the quantized media signal. (Original Claim 30 lines 1-6, Page 20)

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The Final Rejection mailed October 21, 2005 states one ground of rejection. The single ground of rejection is summarized below.

Single Ground of Rejection - Claims 1-30 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

VII. ARGUMENT

Claims 1-30 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The rejection is stated in the Final Rejection mailed October 21, 2005. The entire text of the rejection is quoted below.

“Claims 1-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1, 10, 17, and 24 recite limitations “random noise only” and “not being chaotic noise.” These limitations are not described in the specification in such a way as to reasonably convey to one skilled in the relevant art, at the time the application was filed, had possession of the claimed invention. The specification states “the quantized media signal 108 will include a high level of randomness”, (see page 8, line 14). This implies that the signal would be “highly random” or approaching “complete random,” but the signal would not be “random noise only” or “not being chaotic noise.”

The Original Specification Did Describe the Limitations

The limitations “random noise only” and “not being chaotic noise” of Claims 1, 10, 17, and 24 were clearly described in the original specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention. For example, the original specification included the following description that includes the limitations,

“In one embodiment of the present invention, the media signal need only include random transducer noise having a noise signal amplitude. Random noise is not the same as chaotic noise. Random noise, such as white Gaussian noise, is completely unpredictable from one moment to a next, while chaotic noise is highly predictable over short time periods.” (Page 7, lines 10-15 of Appellants’ Original Specification)

The Phrase Relied Upon in the Final Rejection Does Not Exclude
Appellants' Limitations

The Final Rejection relies upon the phrase at page 8, line 14 of the specification, "the quantized media signal 108 will include a high level of randomness."

Appellants point out that this phrase does not exclude further limitations. In particular, this phrase does not exclude the further limitation, "random noise only, said random noise being completely unpredictable from one moment to the next and not being chaotic noise" as claimed by Appellants.

Appellants' original specification provided a description of these limitations on page 7, lines 10-15, "In one embodiment of the present invention, the media signal need only include random transducer noise having a noise signal amplitude. Random noise is not the same a chaotic noise. Random noise, such as white Gaussian noise, is completely unpredictable from one moment to a next, while chaotic noise is highly predictable over short time periods."

Therefore, Appellants original specification described the claim limitations sufficiently to reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention at the time the application was filed and meets the requirements of 35 U.S.C. §112, first paragraph.

The Final Rejection Does Not Produce a Prima-Facie Case

The substance of the Final Rejection is set out in the statements, "The specification states 'the quantized media signal 108 will include a high level of randomness', ... "This implies that the signal would be 'highly random' or approaching 'complete random', but the signal would not be 'random noise only' or 'not being chaotic noise.'"

This "implication" does not provide a Prima-Facie Case that Appellants have failed to comply with the written description requirement of 35 U.S.C. §112, first paragraph. The statement is merely an implication suggested by the Examiner. This is only one implication. There are other reasonable implications that can be obtained from the statements. For example, the statements could reasonably imply "said random noise being completely unpredictable from one moment to the next and not being chaotic noise" as claimed by Appellants.

Appellants Have Overcome Any Case that is Provided by the Final Rejection

Appellants' specification taken as a whole supports the claim limitations, "random noise only" and "not being chaotic noise." MPEP §2163 II.A.3 states, "An adequate written description of the invention may be shown by any description of sufficient, relevant, identifying characteristics so long as a person skilled in the art would recognize that the inventor had possession of the claimed invention."

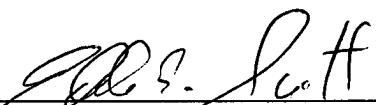
Appellants believe it is clear from the original specification that a person skilled in the art would recognize that the inventor had possession of the claimed invention including the claim limitations "random noise only" and "not being chaotic noise." Appellants' original specification contains an adequate written description of the claimed invention on page 7, lines 10-15, "In one embodiment of the present invention, the media signal need only include random transducer noise having a noise signal amplitude. Random noise is not the same a chaotic noise. Random noise, such as white Gaussian noise, is completely unpredictable from one moment to a next, while chaotic noise is highly predictable over short time periods."

There is a strong presumption that an adequate written description of the claimed invention is present when the application is filed. *In re Wertheim*, 541 F.2d 257, 263, 191 USPQ 90, 97 (CCPA 1976), the implication stated in the Final Rejection is contradicted by Appellants' specification taken as a whole. The implication stated in the

Final Rejection is not sufficient to overcome the presumption that an adequate written description of the claimed invention is present when the application is filed.

It is respectfully requested that claims 1-30 on appeal be allowed.

Respectfully submitted,

By: 

Eddie E. Scott
University of California (LLNL)
7000 East Avenue, Mail Code L-703
Livermore, CA 94550
Attorney for Appellants
Registration No. 25,220
Telephone No. (925) 424-6897

Date: January 19, 2006

VIII. CLAIMS APPENDIX

1. A system for multimedia encryption comprising:

acquisition means for acquiring a media signal, said acquisition means including a random noise transducer for acquiring random noise only, said random noise being completely unpredictable from one moment to the next and not being chaotic noise;

data compression means coupled to said acquisition means to receive and compress said media signal containing random noise that is completely unpredictable from one moment to the next and not being chaotic noise into a compressed data stream;

data acquisition means coupled to said data compression means to receive and select a set of data from the compressed data stream; and

hashing means coupled to said data acquisition means to receive and hash the set of data into a keyword.

2. The system of claim 1 wherein the set of data is one frame of data within the compressed data stream.

3. The system of claim 1 wherein the set of data crosses over several frame boundaries within the compressed data stream.

4. The system of claim 1 wherein: the compressed data stream includes compression transform coefficients; and the set of data includes a set of compression transform coefficients.

5. The system of claim 1 wherein: the compressed data stream includes data frames of varying length; and the set of data includes a set of data frames.

6. The system of claim 1 wherein: the compressed data stream includes predictive data frames; and the set of data includes a predictive data frame.

7. The system of claim 1: wherein the media signal includes a noise signal amplitude; further comprising, an analog to digital converter, having a

quantization step size smaller than the noise signal amplitude, coupled to receive and quantize the media signal; and wherein the data compression module compresses the quantized media signal into a compressed data stream.

8. The system of claim 1 wherein the data compression module compresses the media signal into one from a group consisting of: MJPEG, MPEG1, MPEG2, or MPEG4, H.261, H.320, and H.323 formats.

9. The system of claim 1 further comprising: a pseudo-random number generator coupled to receive and process the keyword in to a set of keywords.

10. A method for multimedia encryption, comprising the steps of:
acquiring a random noise only media signal containing random noise that is completely unpredictable from one moment to the next and not being chaotic noise;

compressing said random noise only media signal containing random noise that is completely unpredictable from one moment to the next and not being chaotic noise;

selecting a set of data from the compressed media signal; and

hashing the set of data into a keyword.

11. The method of claim 10 wherein: the compressed media signal includes data frames; and the selecting step includes the step of selecting one frame of data.

12. The method of claim 10 wherein: the compressed media signal includes data frames and data frame boundaries; and the selecting step includes the step of selecting a set of data which crosses over several data frame boundaries.

13. The method of claim 10 wherein: the compressed media signal includes compression transform coefficients; and the selecting step includes the step of selecting a set of compression transform coefficients.

14. The method of claim 10 wherein: the compressed media signal includes data frames of varying length; and the selecting step includes the step of selecting a set of data frames.

15. The method of claim 10 wherein: the compressed media signal includes predictive data frames; and the selecting step includes the step of selecting a predictive data frame.

16. The method of claim 10: wherein the media signal includes a noise signal amplitude; further comprising the step of quantizing the media signal with a quantization step size smaller than the noise signal amplitude; and wherein the compressing step includes the step of compressing the quantized media signal.

17. A system for multimedia encryption, comprising:
acquisition means for acquiring a media signal, said acquisition means including a random noise transducer for acquiring said media signal, said random noise transducer acquiring said media signal containing only random noise that is completely unpredictable from one moment to the next and not being chaotic noise;

data compression means coupled to said acquisition means to receive and compress said media signal containing random noise that is completely unpredictable from one moment to the next into a compressed data stream;

selection means coupled to said data compression means for selecting a set of data from the compressed data stream; and

hashing means coupled to said selection means for hashing the set of data into a keyword.

18. The system of claim 17 wherein: the compressed media signal includes data frames; and the means for selecting includes means for selecting one frame of data.

19. The system of claim 17 wherein: the compressed media signal includes data frames and data frame boundaries; and the means for selecting includes means for selecting a set of data which crosses over several data frame boundaries.

20. The system of claim 17 wherein: the compressed media signal includes compression transform coefficients; and the means for selecting includes means for selecting a set of compression transform coefficients.

21. The system of claim 17 wherein: the compressed media signal includes data frames of varying length; and the means for selecting includes means for selecting a set of data frames.

22. The system of claim 17 wherein: the compressed media signal includes predictive data frames; and the means for selecting includes means for selecting a predictive data frame.

23. The system of claim 17: wherein the media signal includes a noise signal amplitude; further comprising means for quantizing the media signal with a quantization step size smaller than the noise signal amplitude; and wherein the means for compressing includes means for compressing the quantized media signal.

24. A computer-useable medium embodying computer program code for multimedia encryption by executing the steps of:

acquiring a random noise only media signal, said random noise only media signal containing random noise that is completely unpredictable from one moment to the next and not being chaotic noise;

compressing said random noise only media signal, said random noise only media signal containing random noise that is completely unpredictable from one moment to the next and not being chaotic noise;

selecting a set of data from the compressed media signal; and

hashing the set of data into a keyword.

25. The computer-useable medium of claim 24 wherein: the compressed media signal includes data frames; and the selecting step includes the step of selecting one frame of data.

26. The computer-useable medium of claim 24 wherein: the compressed media signal includes data frames and data frame boundaries; and the selecting step includes the step of selecting a set of data which crosses over several data frame boundaries.

27. The computer-useable medium of claim 24 wherein: the compressed media signal includes compression transform coefficients; and the selecting step includes the step of selecting a set of compression transform coefficients.

28. The computer-useable medium of claim 24 wherein: the compressed media signal includes data frames of varying length; and the selecting step includes the step of selecting a set of data frames.

29. The computer-useable medium of claim 24 wherein: the compressed media signal includes predictive data frames; and the selecting step includes the step of selecting a predictive data frame.

30. The computer-useable medium of claim 24: wherein the media signal includes a noise signal amplitude; further comprising the step of quantizing the media signal with a quantization step size smaller than the noise signal amplitude; and wherein the compressing step includes the step of compressing the quantized media signal.

IX. EVIDENCE APPENDIX

There is “nothing” in the Evidence Appendix.

X. RELATED PROCEEDINGS APPENDIX

There is “nothing” in the Related Proceedings Appendix.